

Appl. No. 09/808,375
Amendment dated September 15, 2004
Reply to Office action of May 17, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-7 (cancelled)

Claim 8 (currently amended): A shaped microfabricated capillary array electrophoresis chip ~~according to claim 1, further~~ comprising:

a planar substrate having a first major surface defining a plurality of separation channel groups,

wherein each said separation channel group includes a grouped pair of converging elongate separation channels extending in fluid communication between a common cathode port and anode port defined by said first major surface,

wherein each separation channel of said grouped pair of separation channels further includes a loading segment,

whereby said first major surface further defines an associated group sample port and a group waste port for each separation channel of said grouped pair of separation channels wherein each associated group sample port and group waste port are in fluid communication across said loading segment of a single separation channel.

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Claim 9 (original): A shaped microfabricated capillary array electrophoresis chip according to claim 8, wherein each said separation channel group extend in fluid communication from a common anode port.

Claims 10-16 (cancelled)

Claim 17 (currently amended): ~~The method of claim 10, further comprising the step of:~~ A method for forming a shaped capillary array electrophoresis chip comprising the steps of:

providing a substantially planar substrate having a first major surface;

forming a plurality of separation channel groups in said first major surface,

wherein each said separation channel group includes a grouped pair of converging elongate separation channels extending in fluid communication between a common cathode port and anode port,

wherein each separation channel of said grouped pair of separation channels further includes a loading segment,

whereby said first major surface further defines an associated group sample port and a group waste port for each separation channel of said grouped pair of separation channels wherein each associated group sample port and group waste port are in fluid communication across said loading segment of a single separation channel.

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Claim 18 (original): The method of claim 17, wherein said step of forming a plurality of separation channel groups further comprises the step of forming each said grouped pair of separation channels to extend in fluid communication with a common anode port.

Claim 19 (currently amended): ~~The method of claim 10, further comprising the step of:~~
A method for forming a shaped capillary array electrophoresis chip comprising the steps of:

providing a substantially planar substrate having a first major surface;

forming 48 converging elongate separation channels in said first major surface;

forming a first perimetrical edge segments extending along the first separation
channel; and

forming a second perimetrical edge segment extending along the last separation
channel.

Claim 20 (cancelled)